

## **REMARKS**

In response to the above-identified Office Action, Applicant amends the application and seeks reconsideration thereof. In this response, Applicant amends claims 12, 14 and 15. Applicant cancels claims 16, 17 and 18. Applicant does not add any new claims. Accordingly, claims 12-15 are pending.

### **I. Claims Objections**

Claim 16 stands objected to 37 C.F.R. § 1.75 as being a duplicate of claim 13. The Applicant has cancelled Claim 16. Thus, the Examiner's objection has been obviated.

### **II. Claims Rejected Under 35 U.S.C. § 112, second paragraph**

Claims 12-16 stand rejected under 35 U.S.C. §112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Applicant has canceled claim 16 and amended each of the remaining claims rejected by the Examiner to clarify the subject matter which the Applicant regards as the invention. Accordingly, reconsideration and withdrawal of the indefiniteness rejection of claims 12-15 are requested.

### **III. Claims Rejected Under 35 U.S.C. § 102**

Claims 12-16 stand rejected under 35 U.S.C. §102(b) as being anticipated by Japanese Patent No. 02022880 issued to Tanaka (hereinafter "Tanaka"). Claim 16 has been canceled. Applicant respectfully disagrees with the rejection of the remaining claims for the following reasons.

In order to establish anticipation, the Examiner must show that each element of a claim is taught by a single reference. In regard to independent claim 12, this claim includes the elements of a first region having a higher vapor phase epitaxy (VPE) growth rate in a horizontal direction than a second region. The Examiner has not clearly identified where in Tanaka these elements are taught. The Examiner indicates that Figures 2(g) through 2(i) in Tanaka and the corresponding

description teach these elements of claim 12. However, the description of Figure 2(g) on page 3, lower right column, lines 1-11 of Tanaka states:

"As shown in Fig. 2(g), this chloride VPE method has a high growth rate of the buried layer in a groove, and after burying the high-resistance semiconductor 26 in the grooves 6 and 7, it can form the buried layer on the second clad layer 4 and the buried layer of the grooves 6 and 7 to be flat. However, it is necessary to adjust the depth of the second clad layer 4 to the upper surface of the contact layer 5, as well as the depth of the grooves 6 and 7 beforehand."

Thus, the description of Figure 2(g) clearly indicates that the described differences in growth rate relate to the growth in a vertical direction which differs in a groove portion from the growth rate in a flat portion of a substrate. This is clearly illustrated in Figure 2(g) and 2(h) where the groove portion of a partially filled trench has grown at a faster rate in a vertical direction than an adjacent flat portion thereby creating in Figure 2(h) a uniform flat surface over the trench and an adjacent area. Thus, Tanaka does not teach a first region with a faster horizontal VPE growth rate than a second region. Therefore, Tanaka does not teach each element of claim 12. Accordingly, reconsideration and withdrawal of the anticipation rejection of claim 12 are requested.

In regard to claims 13-15, these claims depend from independent claim 12 and incorporate the limitations thereof. Thus, at least for the reasons mentioned in regard to claim 12, these claims are not anticipated by Tanaka. Accordingly, reconsideration and withdrawal of the anticipation rejection of claims 13-15 are requested.

## CONCLUSION

In view of the foregoing, it is believed that all claims now pending, namely claims 12-15 patentably define the subject invention over the prior art of record, and are in condition for allowance and such action is earnestly solicited at the earliest possible date. If the Examiner believes that a telephone conference would be useful in moving the application forward to allowance, the Examiner is encouraged to contact the undersigned at (310) 207 3800.

Respectfully submitted,

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I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop Non-Fee Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on January 9, 2004.

  
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